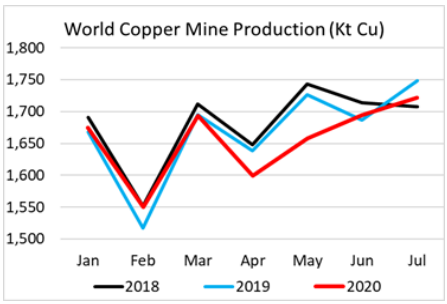
Copper: Preliminary Data for July 2020

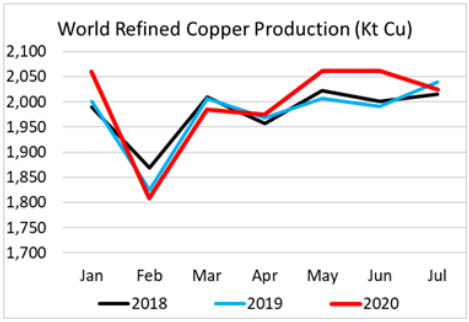
The International Copper Study Group (ICSG) released preliminary data for July 2020 world copper supply and demand in its October 2020 Copper Bulletin. The Bulletin and ICSG online statistical database provide detailed data, on a country basis, for copper mine, smelter, refined and semis production, copper refined usage, trade, stocks and prices. The bulletin is available for sale (annual subscription €550/€850 for orders originating from/outside institutions based in ICSG member countries).

Preliminary data indicates that world copper mine production declined by 0.8% in the first seven months of 2020, with concentrate production declining by 1% and solvent extraction-electrowinning (SX-EW) remaining essentially unchanged:



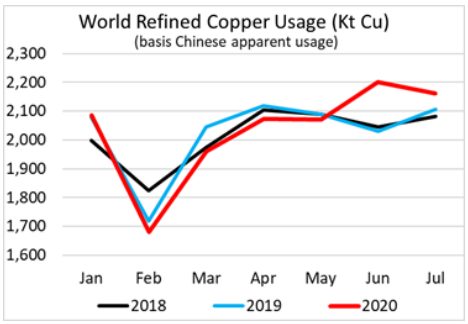
- World mine production is estimated to have declined by 4% in April-May as these two months were the most affected by the COVID-19 related global lockdown that resulted in temporary mine shutdowns/reduced production levels. However, world mine production started to recover in May as lockdown measures eased and the copper industry adapted to the strict health protocols.
- In Peru, stoppages resulting from the COVID-19 pandemic combined with operational issues/adverse weather that affected a few major mines, resulting in a 18% decline in mine output over the first seven months of 2020 including a significant decline of 38% in April-May compared to the same period of 2019. However, as the Peruvian mining industry started to recover the extent of the reduction narrowed to 2.2% in July, compared to the same month in 2019.
- COVID-19 related constraints or other operational issues led to declines in production among other major copper mine producing countries, most notably in Australia, Mexico and the United States.
- In Chile, the world's biggest copper mine producing country, output increased by 1.5%, recovering from production constraints in early 2019 (production was down by 2% in first seven months of 2019).
- Production in the Democratic Republic of Congo (DRC) and Panama increased significantly mainly due to the ramp-up of new mines or expansions. In Indonesia, production grew by 18% as output levels improved following the transition of the country's major two copper mines to different ore zones in 2019.

Preliminary data indicates that world refined copper production increased by 1% during the first seven months of 2020 with primary production (electrolytic and electrowinning) up by 2.3% and secondary production (from scrap) down by 5.2%.



- Chilean electrolytic refined output increased by 44% as in the comparative period of 2019 production was negatively affected by temporary smelter shutdowns whilst undergoing upgrades to comply with new environmental regulations. Total Chilean refined copper production (including Electrowinning) increased by 10%.
- Chinese refined production growth was negatively impacted by temporary shutdowns related to COVID-19 restrictions, tight scrap supply and constraints associated with concentrate imports and oversupply in the sulphuric acid market.
- In Africa, refined production was up 6% in the DRC due to the ramp-up of new or expanded SX-EW plants and by 9% in Zambia where output has been recovering from smelters' operational issues and temporary shutdowns in 2019.
- Indian refined output decreased by 22% primarily as a consequence of the temporary suspension of Birla Copper's operations at the end of March following a national lockdown due to COVID-19.
- Japanese refined production rose by 4% mainly recovering from a number of maintenance shutdowns in the same period of 2019.
- In the United States, temporary shutdowns and the long strike at Asarco led to an estimated decline in refined output of 13%.
- Globally, constrained scrap supply due to the COVID-19 lockdown and lower copper prices in the first half of the year have negatively impacted world secondary refined production.

Preliminary data indicates that world <u>apparent</u> refined copper usage remained essentially unchanged in the first seven months of 2020:



- The COVID-19 related global lockdown has had a significant negative impact on the world economy and subsequently on key copper end-use sectors in all regions.
- World ex-China refined copper usage is estimated to have declined by about 10%: among the biggest copper using regions, refined usage declined by 15% in Japan, 11% in the EU, 4.5% in the United States and by about 13% in Asia (Ex-China).
- However, due to a 44% (735,000 t) increase in net refined copper imports, Chinese <u>apparent</u> usage increased by 10% offsetting declines in other regions of the world. <u>Real</u> Chinese industrial usage was negatively impacted by the COVID-19 related production suspensions at semis fabricators early in the year and weaker external demand and should present lower growth than apparent usage.

Preliminary world refined copper balance in the first seven months of 2020 indicates an <u>apparent</u> deficit of 255,000 t:

- In developing its global market balance, ICSG uses an apparent demand calculation for China that does not take into account changes in unreported stocks [State Reserve Bureau (SRB), producer, consumer, merchant/trader, bonded]. To facilitate global market analysis, however, an additional line item—Refined World Balance Adjusted for Chinese Bonded Stock Changes—is included in the attached table that adjusts the world refined copper balance based on an average estimate of changes in unreported inventories provided by three consultants with expertise in China's copper market.
- In the first seven months of 2020, the world refined copper balance, based on Chinese apparent usage (excluding unreported/bonded stocks), indicated a deficit of 255,000 t. The world refined copper balance adjusted for changes in Chinese bonded stocks indicated a market deficit of about 278,000 t.´

(World Refined Copper Usage and Supply Trends table on next page)

Copper Prices and Stocks:

- Based on the average of estimates provided by independent consultants, China's bonded stocks are thought to have declined by about 23,000 t over the first seven months of 2020 compared to the year-end 2019 level.
- As of the end of September, copper stocks held at the major metal exchanges (LME, COMEX, SHFE) totalled 406,021 t, an increase of 103,634 t (34%) from stocks held at the end of December 2019. Stocks were up at the LME (13%), at COMEX (+113%) and SHFE (+38%).
- The average LME cash price for September 2020 was US$ 6,712,41 /t, up 3.3% from the August average of US$ 6,496,70 /t. The 2020 high and low copper prices through the end of September were US$ 6,837 /t (on 21st Sep) and US$ 4,617.50 /t (on 23rd Mar), respectively, and the year average was US$ 5,848.56 /t (2.5% below the 2019 annual average).

Please visit the ICSG website www.icsg.org for further copper market related information.

World Refined Copper Usage and Supply Trends

Thousand metric tonnes, copper

	2017	2018	2019	2019	2020	2020			
				Jan-Jul		Apr	May	Jun	Jul
World Mine Production	20,058	20,565	20,528	11,682	11,592	1,600	1,658	1,694	1,722
World Mine Capacity	23,993	24,062	24,139	14,416	14,508	2,058	2,134	2,073	2,113
Mine Capacity Utilization (%)	83.6	85.5	85.0	81.0	79.9	77.7	77.7	81.7	81.5
Primary Refined Production	19,485	20,023	20,017	11,464	11,729	1,665	1,725	1,725	1,704
Secondary Refined Production	4,063	4,035	4,028	2,371	2,246	310	336	337	320
World Refined Production (Secondary+Primary)	23,548	24,058	24,045	13,835	13,975	1,975	2,061	2,061	2,025
World Refinery Capacity	27,545	27,979	28,794	16,647	17,144	2,426	2,513	2,438	2,524
Refineries Capacity Utilization (%)	85.5	86.0	83.5	83.1	81.5	81.4	82.0	84.5	80.2
World Refined Usage 1/	23,705	24,484	24,427	14,186	14,230	2,073	2,070	2,202	2,161
World Refined Stocks End of Period	1,375	1,227	1,220	1,322	1,264	1,477	1,410	1,319	1,264
Period Stock Change	10	-148	-7	95	44	-61	-67	-91	-55
Refined Balance 2/	-156	-426	-382	-351	-255	-98	-8	-141	-136
Seasonally Adjusted Refined Balance 3/				-268	-170	6	22	-122	-97
Refined Balance Adjusted for Chinese bonded stock change 4/	-154	-485	-560	-382	-278	-143	-83	-146	-123

Due to the nature of statistical reporting, the published data should be considered as preliminary as some figures are currently based on estimates and could change.
1/ Based on Chinese and EU apparent usage.
2/ Surplus/deficit is calculated using refined production minus refined usage.
3/ Surplus/deficit is calculated using seasonally adjusted refined production minus seasonally adjusted refined usage.
4/ For details of this adjustment see the paragraph of the press release on "World refined copper balance".